

AL.2.2002-173

University of Alberta Library



0 1620 3452390 0

## ASSIGNMENT BOOKLET 6B

Mathematics 4

Module 6: Days 10–18

Home Instructor's and Student's Comments:

**STUDENT FILE NUMBER**  
(if label is missing or incorrect)

\_\_\_\_\_

Date Submitted:

\_\_\_\_\_

Apply Module Label Here

Name

Address

Postal Code

*Please verify that preprinted label is for  
correct course and module.*

### FOR SCHOOL USE ONLY

Assigned Teacher:

\_\_\_\_\_

Date Assignment Received:

\_\_\_\_\_

Grading:

\_\_\_\_\_

Teacher's Comments

\_\_\_\_\_  
Teacher's Signature

Home Instructor: Keep this sheet when it is returned to you as a record of the student's progress.

# **INSTRUCTIONS FOR SENDING IN THIS DISTANCE LEARNING ASSIGNMENT BOOKLET**

When you register for distance learning courses, you are expected to send in Assignment Booklets for corrections regularly. Try to send each Assignment Booklet as soon as you have completed it. Before sending your Assignment Booklet, please check the following:

- Are all the assignments completed? If not, explain why.
- Has your work been reread to be sure the spelling and details are correct?
- Is the record form filled out and the correct module label attached?

## **MAILING**

### **1. Postage Regulations**

Do **not** enclose letters with Assignment Booklets.

**Send all letters in a separate envelope.**

### **2. Postage Rates**

**Take your Assignment Booklet to the post office and have it weighed. Attach enough postage** and seal the envelope. Assignment Booklets will travel faster if correct postage is used and if they are in large envelopes that are no more than two centimetres thick.

## **FAXING**

1. Assignment Booklets may be faxed. Contact your teacher for the fax number.
2. All faxing costs are the responsibility of the sender.

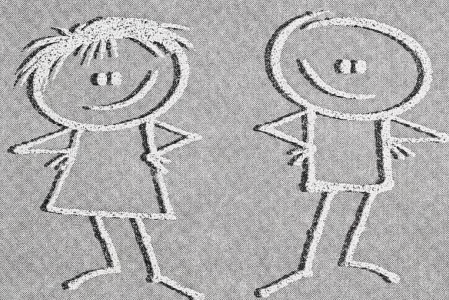
## **E-MAILING**

Assignment Booklets may be e-mailed. Contact your teacher for the e-mail address.



# Mathematics 4

## Module 6 Division



## Assignment Booklet 6B



## FOR TEACHER'S USE ONLY

### Summary

	Total Possible Marks	Your Mark
Day 10	57	
Day 11	38	
Day 12	41	
Day 13	37	
Day 14	27	
Day 15	26	
Day 16	28	
Day 17	(1) 95	
	(2) 20	
Day 18	(1) 20	
	(2) 10	
	399	

### Teacher's Comments

This document is intended for

Students	✓
Teachers	✓
Administrators	
Home Instructors	✓
General Public	
Other	

Mathematics 4  
Module 6: Division  
Assignment Booklet 6B  
Learning Technologies Branch  
ISBN 0-7741-1820-2

### ALL RIGHTS RESERVED

Copyright © 2000, the Crown in Right of Alberta, as represented by the Minister of Learning, Alberta Learning, 11160 Jasper Avenue, Edmonton, Alberta T5K 0L2. All rights reserved. Additional copies may be obtained from the Learning Resources Distributing Centre.

No part of this courseware may be reproduced in any form, including photocopying (unless otherwise indicated), without the written permission of Alberta Learning.

Every effort has been made both to provide proper acknowledgement of the original source and to comply with copyright law. If cases are identified where this effort has been unsuccessful, please notify Alberta Learning so that appropriate corrective action can be taken.

**IT IS STRICTLY PROHIBITED TO COPY ANY PART OF THESE MATERIALS UNDER THE TERMS OF A LICENCE FROM A COLLECTIVE OR A LICENSING BODY.**



# ASSIGNMENT BOOKLET 6B

## MATHEMATICS 4 – MODULE 6: DIVISION

### Notes to the Home Instructor

#### Learning Tasks

The nine mathematics modules and the accompanying Assignment Booklets have been developed so that students become involved in a variety of learning tasks that help them develop mathematical skills, learn how to communicate mathematically, and become mathematical problem solvers.

When completing the assignments, students should work carefully and neatly. Students should do the activities in the Assignment Booklets **independently**. This will ensure that the teacher acquires a more accurate picture of the student's ability and understanding.

If the student is having difficulties, he or she should review the appropriate sections in the Student Module Booklet. The home instructor can assist the student by reviewing these sections with the student and encouraging him or her to explain, describe, or demonstrate (using manipulatives, drawings, and so on) his or her understanding of a particular concept or idea.

#### Assessment and Evaluation

A broad range of assessment tools will be used to gather information for the purpose of evaluating the student's knowledge and understanding of curriculum skills and concepts. It is important that the teacher learns how the student thinks about mathematics as well as what concepts and skills the student has mastered. Assignment Booklet questions, journal entries, performance assessments, observations by the home instructor, and student self-evaluation pages may all be used. As well, the teacher may also use a final test.

In order to give the student and home instructor feedback on the student's current level of achievement throughout the school year, the student's teacher will provide written comments and assign a grade at the end of each module. The mark for each module will be determined primarily by how well the student completes the assignments in the Assignment Booklets. However, other broad-based assessment techniques (journal entries, performance assessments, and so on) may also be used.



57

## Day 10: Working with Remainders

12

1. Write the number that makes each division fact true. Then write the related multiplication fact that helps you know.

a.

$$\begin{array}{r} \phantom{00} \\ 5 \overline{) 35} \end{array}$$

\_\_\_\_\_

b.

$$\begin{array}{r} \phantom{00} \\ 7 \overline{) 42} \end{array}$$

\_\_\_\_\_

c.

$$\begin{array}{r} \phantom{00} \\ 6 \overline{) 36} \end{array}$$

\_\_\_\_\_

d.

$$\begin{array}{r} \phantom{00} \\ 9 \overline{) 45} \end{array}$$

\_\_\_\_\_

e.

$$\begin{array}{r} \phantom{00} \\ 8 \overline{) 72} \end{array}$$

\_\_\_\_\_

f.

$$\begin{array}{r} \phantom{00} \\ 7 \overline{) 56} \end{array}$$

\_\_\_\_\_

2. Use your multiplication table (or the facts you already know) to answer these questions. An example is shown.

**Example:** The multiplication fact that will help you solve  $7 \overline{) 31}$  is

$7 \times 4 = 28$ . This multiplication fact can also be written as

a related division fact:  $28 \div 7 = 4$ . The solution to  $7 \overline{) 31}$

is **4 R3**.



- ③ a. The multiplication fact that will help you solve  $8\overline{)67}$  is

\_\_\_\_\_. This multiplication fact can also be written as a related division fact: \_\_\_\_\_. The solution to  $8\overline{)67}$  is \_\_\_\_\_.

- ③ b. The multiplication fact that will help you solve  $5\overline{)13}$  is

\_\_\_\_\_. This multiplication fact can also be written as a related division fact: \_\_\_\_\_. The solution to  $5\overline{)13}$  is \_\_\_\_\_.

- ③ c. The multiplication fact that will help you solve  $4\overline{)37}$  is

\_\_\_\_\_. This multiplication fact can also be written as a related division fact: \_\_\_\_\_. The solution to  $4\overline{)37}$  is \_\_\_\_\_.

- ⑥ 3. Solve the following questions that have remainders. Use your multiplication facts to help you.

a.  $22 \div 6 =$  \_\_\_\_\_

b.  $33 \div 4 =$  \_\_\_\_\_

c.  $12 \div 5 =$  \_\_\_\_\_

d.  $17 \div 3 =$  \_\_\_\_\_

e.  $50 \div 8 =$  \_\_\_\_\_

f.  $25 \div 7 =$  \_\_\_\_\_



- ⑧ 4. Give your best estimate for each of these division questions. (**Do not** include remainders.) Then write the related fact that you used.

a.  $42 \div 5 =$  \_\_\_\_\_ Related fact: \_\_\_\_\_

b.  $15 \div 4 =$  \_\_\_\_\_ Related fact: \_\_\_\_\_

c.  $22 \div 7 =$  \_\_\_\_\_ Related fact: \_\_\_\_\_

d.  $30 \div 4 =$  \_\_\_\_\_ Related fact: \_\_\_\_\_

5. Answer each of these story problems. Give an **estimate**, not an exact answer.

- ③ a. Tempe had to make 7 party bags for her sister's birthday. She was given a bag of 40 caramels to share among the party bags. **About** how many caramels would go in each bag?

Division sentence: \_\_\_\_\_

Related sentence: \_\_\_\_\_

Solution: \_\_\_\_\_

- ③ b. Meno had 50 greeting cards. He sorted them into 8 piles. **About** how many cards are in each pile?

Division sentence: \_\_\_\_\_

Related sentence: \_\_\_\_\_

Solution: \_\_\_\_\_



③

- c. Jared had 33 candies. He put them into 9 bags. **About** how many candies did he put in each bag?

Division sentence: \_\_\_\_\_

Related sentence: \_\_\_\_\_

Solution: \_\_\_\_\_

⑤

6. Solve the following division questions. Write the remainder beside the quotient. For example: 6 R3.

a.  $8 \overline{)33}$

b.  $5 \overline{)49}$

c.  $7 \overline{)60}$

d.  $7 \overline{)48}$

e.  $6 \overline{)34}$



7. Solve each of these problems. Use the remainder to help you write your sentence answer.

④

- a. Charles is making miniature snowmen for a craft sale. He needs 74 foam balls. The foam balls come in packages of 8. How many packages does he need to buy?

Sentence answer: \_\_\_\_\_  
\_\_\_\_\_

④

- b. A box holds 6 jars. How many boxes are needed to pack 33 jars?

Sentence answer: \_\_\_\_\_  
\_\_\_\_\_



38

## Day 11: Checking the Answer




1.

## Journal Entry

In the lesson for Day 10, you learned to check your answers to division problems by using the multiplication facts or by using a set of counters. Why is it important to check your answers to division problems? Think of a real-life situation where this would be important.

[illegible]



- ⑤ 2. Use your counters or base ten blocks to show  $44 \div 7 =$  . Then draw a sketch of your solution that shows the division. Draw a circle around the remainder.

Solution:  $44 \div 7 =$  \_\_\_\_\_

3. Fill in the blanks with the correct responses as you check the answers to these questions. Then tell whether the division sentence is correct or not correct.

③ a.  $17 \div 7 = 2 \text{ R}3$

Check:  $7 \times 2 =$  \_\_\_\_\_




\_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_  
(Remainder)

The division sentence,  $17 \div 7 = 2 \text{ R}3$ , is \_\_\_\_\_.  
(correct, not correct)



③

**b.**  $35 \div 6 = 5 \text{ R}4$

Check:  $6 \times 5 =$  \_\_\_\_\_  


$$\underline{\hspace{2cm}} + \underset{\text{(Remainder)}}{\underline{\hspace{2cm}}} = \underline{\hspace{2cm}}$$

(Remainder)

The division sentence,  $35 \div 6 = 5 \text{ R}4$ , is \_\_\_\_\_.  
(correct, not correct)

(correct, not correct)

③

**c.**  $28 \div 6 = 4 \text{ R}3$

Check:  $6 \times 4 =$  \_\_\_\_\_

$$\underline{\hspace{2cm}} + \underset{\text{(Remainder)}}{\underline{\hspace{2cm}}} = \underline{\hspace{2cm}}$$

(Remainder)

The division sentence,  $28 \div 6 = 4 \text{ R}3$ , is \_\_\_\_\_.  
(correct, not correct)

(correct, not correct)

③

**d.**  $40 \div 7 = 5 \text{ R}5$

Check:  $7 \times 5 =$  \_\_\_\_\_

$$\underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

(Remainder)

(Remainder)

The division sentence,  $40 \div 7 = 5 \text{ R}5$ , is \_\_\_\_\_.  
(correct, not correct)

(correct, not correct)

4. Solve the following division questions. Use the related operation (multiplication) to check your answers.

③

a.  $32 \div 6 =$  \_\_\_\_\_ R \_\_\_\_\_

Related multiplication fact:

$$\begin{array}{c} \underline{\hspace{1cm}} \\ \downarrow \end{array} \times \begin{array}{c} \underline{\hspace{1cm}} \\ \downarrow \end{array} = \begin{array}{c} \underline{\hspace{1cm}} \\ \downarrow \end{array}$$

Check:

$$\underline{\hspace{1cm}} \times \underline{\hspace{1cm}} = \underline{\hspace{1cm}} + \underline{\hspace{1cm}} \text{ (Remainder)}$$

③

b.  $23 \div 5 =$  \_\_\_\_\_ R \_\_\_\_\_

Related multiplication fact:

$$\begin{array}{c} \underline{\hspace{1cm}} \\ \downarrow \end{array} \times \begin{array}{c} \underline{\hspace{1cm}} \\ \downarrow \end{array} = \begin{array}{c} \underline{\hspace{1cm}} \\ \downarrow \end{array}$$

Check:

$$\underline{\hspace{1cm}} \times \underline{\hspace{1cm}} = \underline{\hspace{1cm}} + \underline{\hspace{1cm}} \text{ (Remainder)}$$

③

c.  $46 \div 7 =$  \_\_\_\_\_ R \_\_\_\_\_

Related multiplication fact:

$$\begin{array}{c} \underline{\hspace{1cm}} \\ \downarrow \end{array} \times \begin{array}{c} \underline{\hspace{1cm}} \\ \downarrow \end{array} = \begin{array}{c} \underline{\hspace{1cm}} \\ \downarrow \end{array}$$

Check:

$$\underline{\hspace{1cm}} \times \underline{\hspace{1cm}} = \underline{\hspace{1cm}} + \underline{\hspace{1cm}} \text{ (Remainder)}$$



③

d.  $38 \div 4 = \underline{\hspace{1cm}} \text{ R } \underline{\hspace{1cm}}$

Related multiplication fact:

$$\begin{array}{c} \underline{\hspace{1cm}} \\ \downarrow \end{array} \times \begin{array}{c} \underline{\hspace{1cm}} \\ \downarrow \end{array} = \begin{array}{c} \underline{\hspace{1cm}} \\ \downarrow \end{array}$$

Check:

$$\underline{\hspace{1cm}} \times \underline{\hspace{1cm}} = \underline{\hspace{1cm}} + \underline{\hspace{1cm}} \text{ (Remainder)}$$

④

5. Solve these problems in your head using the Zap the Zero method. Remember to put the zeros back in the quotient.

a.  $320 \div 8 = \underline{\hspace{1cm}}$

b.  $2500 \div 5 = \underline{\hspace{1cm}}$

c.  $180 \div 6 = \underline{\hspace{1cm}}$

d.  $4000 \div 8 = \underline{\hspace{1cm}}$

e.  $360 \div 9 = \underline{\hspace{1cm}}$

f.  $6300 \div 7 = \underline{\hspace{1cm}}$

g.  $270 \div 3 = \underline{\hspace{1cm}}$

h.  $8100 \div 9 = \underline{\hspace{1cm}}$

41

## Day 12: Deciding Which Operation to Use

---



1. Turn to page 101 in your textbook. Complete the exercises in Practise Your Skills by choosing the correct operation for each problem. Then solve each problem. Show your work. (You may wish to draw a sketch, write number sentences, or write out your calculation.)

### Practise Your Skills, Questions 1 to 6

4

1. Operation: \_\_\_\_\_

Solution: \_\_\_\_\_

4

2. Operation: \_\_\_\_\_

Solution: \_\_\_\_\_

4

3. Operation: \_\_\_\_\_

Solution: \_\_\_\_\_



④

4. Operation: \_\_\_\_\_

Solution: \_\_\_\_\_

④

5. Operation: \_\_\_\_\_

Solution: \_\_\_\_\_

④

6. Operation: \_\_\_\_\_

(**Hint:** you may need to use more than one operation to solve this problem.)

Solution: Which is less expensive? \_\_\_\_\_

How much less? \_\_\_\_\_

2. Fill in the missing numbers in each table.

③

a.

	$\times 10$	$\times 100$
	500	
		300
	530	

③

b.

	$\times 10$	$\times 100$
		8000
	70	

③

c.

	$\times 10$	$\times 100$
		8200

③

d.

	$\times 10$	$\times 100$
	460	





## Journal Entry

How do you decide which operation to use when you are solving a math problem?

[illegible]

37

## Day 13: Division in Three Steps

---

Think about the three-step method for division that you learned about in Day 13. For questions 1, 2, and 3, do only the step asked for.

- ① 1. For this question do only Step 1: Estimate the closest fact.

$$4 \overline{) 29}$$

- ① 2. For this question, do only Step 2: Multiply.

$$\begin{array}{r} 4 \\ 7 \overline{) 31} \\ \underline{\phantom{00}} \end{array}$$

- ④ 3. a. For this question, do only Step 3: Subtract.

$$\begin{array}{r} 6 \\ 8 \overline{) 53} \\ \underline{- 48} \end{array}$$

b. What is the remainder? \_\_\_\_\_

c. Can you divide by 8 again? Explain.

---

---



4. Solve the following division question using the three-step method you have learned. Show all of your work. An example is shown.

**Example:**  $19 \div 4 =$

$$\begin{array}{r} 4 \overline{)19} \\ - 16 \\ \hline \end{array}$$

Solution:  $19 \div 4 = 4 \text{ R}3$

③

a.  $30 \div 7 =$

Show your work.

Solution:  $30 \div 7 =$  \_\_\_\_\_ R \_\_\_\_\_

③

b.  $63 \div 8 =$

Show your work.

Solution:  $63 \div 8 =$  \_\_\_\_\_ R \_\_\_\_\_

③

c.  $43 \div 6 =$

Show your work.

Solution:  $43 \div 6 =$         R       

③

d.  $51 \div 8 =$

Show your work.

Solution:  $51 \div 8 =$         R

④

5. These questions include zeros. Solve them quickly in your head if you can. Write the answers on the lines. If they can't be solved, cross them out.

a.  $0 \div 7 =$  \_\_\_\_\_

b.  $15 \div 0 =$  \_\_\_\_\_

c.  $0 \div 8 =$  \_\_\_\_\_

d.  $0 \div 35 =$  \_\_\_\_\_

e.  $42 \div 0 =$  \_\_\_\_\_

f.  $0 \div 181 =$  \_\_\_\_\_

g.  $82 \div 0 =$  \_\_\_\_\_

h.  $0 \div 53 =$  \_\_\_\_\_

⑤

6. Write a story problem that tells about  $23 \div 6$ . End the problem with a question. Then solve the problem using the three-step method you have been learning about. Include a sentence answer.

---

---

---

---

Sentence answer: \_\_\_\_\_

---



- ⑤ 7. Debbie wanted to share 83 pieces of bubblegum equally among a total of 9 people. How many pieces of bubblegum did each person get?
- ⑤ 8. Serena wants to plant 5 rows of flowers in her flowerbed. She has 38 flowers to transplant. How many flowers should she put in each row in order to make each row the same? How many flowers will be left over?

27

## Day 14: Dividing Money Amounts

---

8

1. For each question, think of a related division fact. Then estimate each quotient.

a.  $4 \overline{)83}$

b.  $7 \overline{)76}$

c.  $2 \overline{)63}$

d.  $5 \overline{)52}$

e.  $3 \overline{)65}$

f.  $2 \overline{)87}$

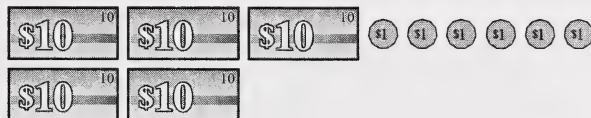
g.  $3 \overline{)94}$

h.  $6 \overline{)71}$

2. For each question, redraw the money amounts so that each person gets an equal share.

3

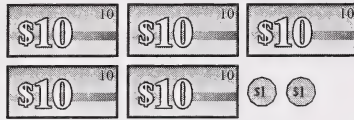
- a. \$56 shared by 4 people



Each share is \_\_\_\_\_.

③

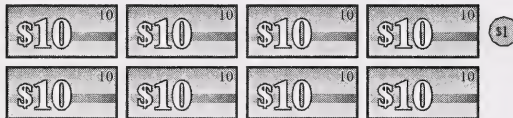
b. \$52 shared by 2 people



Each share is \_\_\_\_\_.

③

c. \$81 shared by 3 people



Each share is \_\_\_\_\_.



- ⑤ 3. Toni likes to collect coloured leaves in the fall. On the first day she collected 7 leaves. On the second day she collected 9 leaves. On the third day she collected 11 leaves. She continued to increase the number of leaves she collected by 2 each day. How many leaves did she collect on Day 12?

ANSWER TO THE PROBLEM

---

---

- ⑤ 4. Rodney tried to stump his friends by asking them a math brain teaser:

“I’m thinking of a number between 200 and 300. If you count by 10s, you say its name. It can be divided by 3 and by 9. What is the number?”

What number is Rodney thinking of?

ANSWER TO THE PROBLEM

---

---

26

## Day 15: Division in Four Steps



1.

## Journal Entry

Have you ever watched older friends or older members of your family use pencil and paper to figure out the answers to difficult division problems? Think about times when this has happened or ask them about this kind of division. When do they have to divide numbers by using pencil and paper? (They may call this long division.) Do they divide when they are at work? Do they use shortcuts to divide more quickly? (If you can't think of the answers here, find out more by talking to your home instructor, friends, or family members.)

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

(12)

2. Use the four-step method to complete the following division questions.

a.  $2 \overline{)46}$

b.  $3 \overline{)80}$

c.  $5 \overline{)88}$

d.  $4 \overline{)74}$



**3.** Use the four-step method to solve these division problems.

- ③      **a.** Molly wants to buy some books by her favourite author. The books are on sale for \$4 each. How many books can she buy for \$60?
- ③      **b.** Sixty-eight students signed up to play after-school soccer. How many teams of 6 can be made?
- ③      **c.** Eric bought a package of photo album refill pages. There are 87 pages in the package. If Eric divides the pages evenly into 3 albums, how many pages will each photo album have?

28

## Day 16: More Ways to Check Quotients

---

4

1. Answer these questions by solving them quickly in your head. Write the correct answers in the empty spaces.

a.  $35 \div 35 =$  \_\_\_\_\_

b.  $24 \div 1 =$  \_\_\_\_\_

c.  $15 \div 15 =$  \_\_\_\_\_

d.  $0 \div 64 =$  \_\_\_\_\_

e.  $19 \div 1 =$  \_\_\_\_\_

f.  $75 \div 75 =$  \_\_\_\_\_

g.  $0 \div 26 =$  \_\_\_\_\_

h.  $42 \div 1 =$  \_\_\_\_\_

3

2. Which of these problems can be completed quicker with a calculator than in your head? Circle the problems you choose.

$87 \div 3$

$0 \div 749$

$67 \div 4$

$55 \div 55$

$300 \div 100$

$878 \div 8$

- ④ 3. Which of these problems can be completed quicker in your head than with a calculator? Circle your choices.

$$64 \div 7$$

$$0 \div 52$$

$$77 \div 1$$

$$340 \div 10$$

$$89 \div 4$$

$$2600 \div 100$$

4. Divide to find each answer. Then show how you would check each answer using the related operation.

④ a.  $2 \overline{)35}$

Check

④ b.  $3 \overline{)58}$

Check





## Day 17: Putting It All Together (II)

---

95

### Part 1: Reviewing the Concepts

Use what you know about division to complete the following questions. Look back in the Student Module Booklet if you need to review any of the concepts you have learned. You are to complete **all** of the questions in Part 1.

1. Write the closest related multiplication fact that you would use to solve each of the division questions. **Do not** solve the questions.

①

a.  $33 \div 5 =$

Related multiplication fact: \_\_\_\_\_

①

b.  $75 \div 9 =$

Related multiplication fact: \_\_\_\_\_

①

c.  $47 \div 5 =$

Related multiplication fact: \_\_\_\_\_

①

d.  $29 \div 6 =$

Related multiplication fact: \_\_\_\_\_

②

2. What is meant when you are asked to give an **estimate** for a question?

---

---

---

- ⑥ 3. Estimate the answer to these problems. (**Do not** show remainders.)

a.  $43 \div 6 =$  \_\_\_\_\_

b.  $18 \div 4 =$  \_\_\_\_\_

c.  $32 \div 5 =$  \_\_\_\_\_

d.  $38 \div 7 =$  \_\_\_\_\_

e.  $26 \div 7 =$  \_\_\_\_\_

f.  $19 \div 3 =$  \_\_\_\_\_

- ③ 4. Three cartons contain 65 books. Estimate the number of books in each carton.

5.  $51 \div 6 = 8 \text{ R}3$

- ③ a. Prove that the answer to this question is correct by drawing an array that shows how the question could be solved.



- ③ b. Use the related operation (multiplication) and check the answer by turning the question around. Write your answer on the lines below.

$51 \div 6$  is equal to 8 R3 because

---

---

---

---

6. Tell whether the answers to the following questions are correct. Use the related multiplication facts to help you decide. Show your thinking by writing in the spaces provided. Circle your choice.

**Example:**  $34 \div 8 = 4 \text{ R}4$

Correct

Not correct

$$8 \times 4 = 32$$

$32 + \text{R}4$  is equal to 36, not 34.

③

a.  $26 \div 4 = 6 \text{ R}2$

Correct

Not correct

③

b.  $49 \div 5 = 9 \text{ R}3$

Correct

Not correct

③

7. Solve by “zapping” the zeros. Remember to put the zeros back after you have calculated the number fact.

a.  $320 \div 8 =$  \_\_\_\_\_

b.  $5400 \div 9 =$  \_\_\_\_\_

c.  $150 \div 3 =$  \_\_\_\_\_

d.  $280 \div 7 =$  \_\_\_\_\_

e.  $1800 \div 2 =$  \_\_\_\_\_

f.  $420 \div 6 =$  \_\_\_\_\_

②

8. Tell what **clue words** are and why you might look for them in a story problem.

---

---

---

④

9. Choose the operation for each of these word problems. You **do not** have to solve the problems.

- a. Andi and Sam have \$54 to spend. If they share it equally, how much money will each boy get?

Operation: \_\_\_\_\_

- b. Andi bought 2 books for himself, 18 hockey cards for his little brother, and a small plant for his grandmother. How many items did he buy in all?

Operation: \_\_\_\_\_

- c. Sam found a sale on computer games. He bought 3 games worth \$12 each. How much in all did he spend on computer games?

Operation: \_\_\_\_\_

- d. Andi and Sam started out with \$54.00 and returned home with \$5.25. How much did they spend?

Operation: \_\_\_\_\_

- ② 10. Solve these questions by dropping common zeros and using basic facts.

a.  $360 \div 60 =$  \_\_\_\_\_

b.  $2500 \div 50 =$  \_\_\_\_\_

c.  $6300 \div 70 =$  \_\_\_\_\_

d.  $810 \div 90 =$  \_\_\_\_\_

- ⑫ 11. Solve these division problems Use the four-step method to help you divide.

a. 
$$\begin{array}{r} 4 \overline{) 93} \end{array}$$

b. 
$$\begin{array}{r} 6 \overline{) 27} \end{array}$$

c. 
$$\begin{array}{r} 8 \overline{) 45} \end{array}$$

d. 
$$\begin{array}{r} 2 \overline{) 59} \end{array}$$

- ④ 12. Fill in the missing words or numbers in each statement.

a. Zero divided by any number will equal \_\_\_\_\_.

b.  $14 \div 0 = 0$  is a \_\_\_\_\_ statement.  
(true, false)

c. A number divided by itself is equal to \_\_\_\_\_.

d. A number divided by 1 is equal to \_\_\_\_\_.





13. Turn to page 191 in your textbook. Complete questions 1 to 7 of Practise Your Skills. Write your answers in the spaces below.

**Practise Your Skills, Questions 1 through 7**

- ⑩
1. There are \_\_\_\_\_ eights in 57.
  2. There are \_\_\_\_\_ fours in 35.

3. 
$$6 \overline{) 88}$$

4. 
$$9 \overline{) 70}$$

5. 
$$7 \overline{) 81}$$

6. 
$$3 \overline{) 22}$$

7. 
$$5 \overline{) 98}$$

- ③ 14. Answer these questions.

a.  $18 \div 18 =$  \_\_\_\_\_

b.  $45 \div 45 =$  \_\_\_\_\_

c.  $37 \div 1 =$  \_\_\_\_\_

d.  $65 \div 65 =$  \_\_\_\_\_

e.  $89 \div 1 =$  \_\_\_\_\_

f.  $0 \div 30 =$  \_\_\_\_\_

⑥

**15.** Solve this question two ways:  $38 \div 6$ **a.** Use pencil and paper.**b.** Use a calculator.

$$6 \overline{) 38}$$

$$38 \div 6 = \underline{\hspace{2cm}}$$

**c.** Is it easy for you to check your answer in part a. by using a calculator? Explain.

---

---

---

---

**16.** Fill in the missing numbers in each table.

③

**a.**

	$\times 10$	$\times 100$
		8300

3	b.		$\times 10$	$\times 100$
		620		

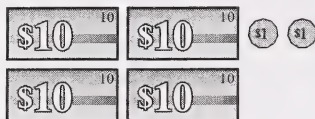
- 5 17. A bag of doughnuts costs 95¢. If 4 friends share the cost as fairly as possible, how much will each person pay?

- 5 18. Books at a bookstore are being packed into cartons. Eight books fit in each carton. How many cartons are needed to pack 68 books?

19. Redraw the money amounts so that each person gets an equal share.

③

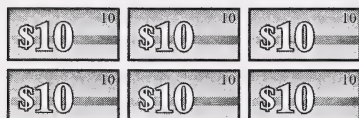
a. \$42 shared by 3 people



Each share is \_\_\_\_\_.

③

b. \$60 shared by 4 people



Each share is \_\_\_\_\_.



20

## Part 2: Challenge Activities

Choose **either** Activity A **or** Activity B. You may do both if you wish.

### Activity A: Planning a Patio

In your job as a Landscape Planner you have been asked to plan the sidewalk and patio areas in front of the library.

Your project is to use square concrete blocks to create a **rectangular** patio on the south side of the library. The blocks are large—they measure 1 m by 1 m! You have been given 56 blocks to cover the patio area.

How many different ways can you arrange the blocks to make a rectangular patio? Try to use all or nearly all of the blocks for each arrangement.

**Hint 1:** Find all the numbers you can that divide evenly into 56.

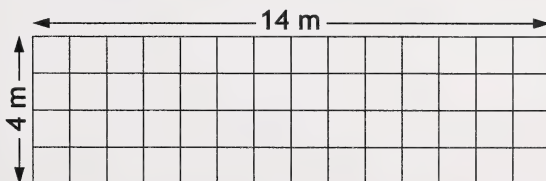
**Hint 2:** Try to divide 56 by other numbers, too. You can use the remainders to make sidewalks somewhere else!

**Hint 3:** Remember what you have learned about dividing by 1.

Draw the arrangements of blocks in the space below each solution. An example is shown.

#### Arrangement 1

\_\_\_\_\_ 4 \_\_\_\_\_ m wide by \_\_\_\_\_ 14 \_\_\_\_\_ m long



$$56 \div \underline{4} = \underline{14}$$

Leftover tiles? 0

**Arrangement 2**

\_\_\_\_\_ m wide by \_\_\_\_\_ m long

$$56 \div \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

Leftover blocks? \_\_\_\_\_

**Arrangement 3**

\_\_\_\_\_ m wide by \_\_\_\_\_ m long

$$56 \div \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

Leftover blocks? \_\_\_\_\_

**Arrangement 4**

\_\_\_\_\_ m wide by \_\_\_\_\_ m long

$$56 \div \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

Leftover blocks? \_\_\_\_\_

**Arrangement 5**

\_\_\_\_\_ m wide by \_\_\_\_\_ m long

$$56 \div \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

Leftover blocks? \_\_\_\_\_

**Arrangement 6**

\_\_\_\_\_ m wide by \_\_\_\_\_ m long

$$56 \div \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

Leftover blocks? \_\_\_\_\_

**Arrangement 7**

\_\_\_\_\_ m wide by \_\_\_\_\_ m long

$$56 \div \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

Leftover blocks? \_\_\_\_\_



Use felts or crayons to shade the patio arrangements you like the best on the plan of the library and park. Decide where you will put the leftover blocks.

[illegible]

10

**Activity B: Planning a Party**

Turn to pages 102 and 103 of the textbook.

Follow the directions on page 102. Look carefully at the pictures on both pages.

You will have to use the different mathematical operations to make your party bags with your \$25.

Write your selections in the spaces below.

**It's Time for a Party!**

Number of people invited to the party: \_\_\_\_\_

My loot bags will contain:	Each single item will cost:	Total cost for these items is:
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____
5. _____	_____	_____
6. _____	_____	_____

Total cost of all the items: \_\_\_\_\_

**Remember! You have only \$25 to spend.**

Did you have any money left? \_\_\_\_\_

If so, how much? \_\_\_\_\_

Here's how I used the four operations in my work:

---

---

---

---

---

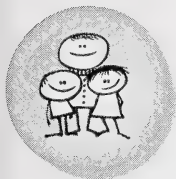


## Day 18: Assessing What You Know (II)

### Home Instructor's Assessment Page for Day 18

#### Directions for the Home Instructor

Remove this sheet from the Assignment Booklet. Use the Checklist and Comments sections to help evaluate the student's work. When the Day 18 activities have been completed, firmly attach this sheet to Assignment Booklet 6B.



Student's Name \_\_\_\_\_

Home Instructor \_\_\_\_\_ Date \_\_\_\_\_

Indicate in the Checklist and Comments sections what you observe and hear as the student works through the assessment task. Encourage the student to “think out loud” as he or she works. As you observe, you may wish to use questions or prompts like the following to help in determining the student's level of understanding.

- What does the problem ask you to find?
- Why are you placing your base ten blocks that way?
- Can you place them any other way?
- Why did you draw the picture like that?
- Why did you draw the number line like that?
- How do you know that is the right answer? Is there a way to check it?
- Why did you estimate that way? Is another answer possible? Give me an example.
- What steps are you following to do the calculation?
- Why did you estimate? multiply? subtract?
- What is a remainder? What does the remainder tell you?



**Checklist**

- |  |                              |                                  |
|--|------------------------------|----------------------------------|
| <b>A.</b> The student demonstrates a group of items being shared or grouped.   | <input type="checkbox"/> Yes | <input type="checkbox"/> Not yet |
| <b>B.</b> The student sketches solutions to division problem by drawing arrays similar to the arrangement of base ten blocks.      | <input type="checkbox"/> Yes | <input type="checkbox"/> Not yet |
| <b>C.</b> The student is able to show repeated subtraction on a number line or is able to skip count backward to solve a division. | <input type="checkbox"/> Yes | <input type="checkbox"/> Not yet |
| <b>D.</b> The student understands how to proceed after reading a problem that involves division.                                   | <input type="checkbox"/> Yes | <input type="checkbox"/> Not yet |
| <b>E.</b> The student is able to give a reasonable estimate about the answer to a division problem.                                | <input type="checkbox"/> Yes | <input type="checkbox"/> Not yet |
| <b>F.</b> The student has a clear understanding of the steps to follow in calculating a division problem.                          | <input type="checkbox"/> Yes | <input type="checkbox"/> Not yet |

**Comments**

Add any comments you have regarding the student's performance on the assessment task or any other information about the student's learning experiences in this module that you would like to share with the teacher.

---

---

---

---

---

## Day 18: Assessing What You Know (II)

### Student's Assessment Page for Day 18

Student's Name \_\_\_\_\_

20

### Part 1: Showing What You Can Do

Your assignment is to solve two problems that use the division operation. You must show how to solve each problem in **two** different ways. Show all your work in the space provided.

5

1. Mandi has decided to give away her collection of 36 music posters to her friends. Each of her 4 friends is to get the same number of posters. How many posters will each friend get?

**Method 1:** Use base ten blocks and your  $\times/\div$  mat to solve the problem. Then draw a picture to show how you arranged the blocks. (If you don't have a set of base ten blocks, you may use the base ten cut-outs found in Day 9 of the Cut-Out Learning Aids section of the Appendix.)



⑤

**Method 2:** Use repeated subtraction or skip counting backward to solve the problem. Show your work on a number line.

2. Jasmin is helping her dad in the warehouse. She is packing boxes with catalogues to be sent to several stores in the region. Each box will hold 5 catalogues. How many boxes will she need if she has to pack 58 catalogues?

⑤

**Method 1:** Estimate the quotient. Write an explanation of the estimate you make.

⑤

**Method 2:** Solve by using the four-step method you have learned. Show all of your calculations. If there is a remainder, explain what the remainder means or what it tells you.

10

## Part 2: Basic Number Facts

This section is made up of two timed tests. Ask your home instructor to time you as you do each test. Wait for your home instructor to tell you when to begin. **Do not mark these tests. They will be marked by your teacher.**

### 1. Multiplication Number Facts

**Timed Test: 2 minutes**

5

$$\begin{array}{r} 7 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 8 \\ \hline \end{array}$$

$7 \times 7 =$

$4 \times 8 =$

$5 \times 4 =$

$9 \times 5 =$

$3 \times 7 =$

$$\begin{array}{r} 9 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ \times 6 \\ \hline \end{array}$$

$8 \times 4 =$

$5 \times 5 =$

$9 \times 4 =$

$5 \times 7 =$

$7 \times 4 =$

$$\begin{array}{r} 3 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 9 \\ \hline \end{array}$$



If you finish before the two minutes are up, check your answers. Wait for your home instructor to tell you when to begin the next test.



## 2. Division Number Facts

Timed Test: 2 minutes

$$9 \overline{)81}$$

$$4 \overline{)28}$$

$$9 \overline{)45}$$

$$5 \overline{)25}$$

$$8 \overline{)32}$$

$$63 \div 9 =$$

$$21 \div 3 =$$

$$18 \div 9 =$$

$$42 \div 7 =$$

$$54 \div 6 =$$

$$8 \overline{)64}$$

$$9 \overline{)72}$$

$$7 \overline{)35}$$

$$8 \overline{)24}$$

$$6 \overline{)48}$$

$$56 \div 7 =$$

$$27 \div 9 =$$

$$28 \div 7 =$$

$$36 \div 9 =$$

$$30 \div 6 =$$

$$7 \overline{)21}$$

$$6 \overline{)24}$$

$$4 \overline{)32}$$

$$7 \overline{)49}$$

$$7 \overline{)63}$$



If you finish before the two minutes are up, check your answers.

## Part 3: Thinking About What You Know

Part 3 is a chance for you to assess your learning in Module 6. Look back through the Student Module Booklet. On what days did you learn new things that you didn't know before? Was there anything you found difficult or hard to understand? What things did you enjoy? What things would you like to know more about?

Now, using complete sentences, finish the following paragraph starters. You may wish to talk over your ideas with your home instructor before you being writing.

1. I think Module 6: Division is mainly about \_\_\_\_\_

---

---

---

---

2. Some things I learned in this module are \_\_\_\_\_

---

---

---

---

---

---

---

---

3. One thing I liked about this module is \_\_\_\_\_

---

---

---

---

4. Something I don't really understand is \_\_\_\_\_

---

---

---

---

---

5. Something I would like to learn more about is \_\_\_\_\_

---

---

---

---

---

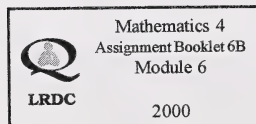
6. Something else I'd like to say is \_\_\_\_\_

---

---

---

---



AL. 8. 200 2-1-15  
NO ILL  
C 2  
V. 6

**ASSIGNMENT BOOKLET 6A**

Mathematics 4  
Module 6: Days 1–9

**Home Instructor's and Student's Comments:**

**STUDENT FILE NUMBER**  
(if label is missing or incorrect)

Date Submitted:

**Apply Module Label Here**

**Name**

**Address**

**Postal Code**

*Please verify that preprinted label is for  
correct course and module.*

**FOR SCHOOL USE ONLY**

Assigned Teacher:

Date Assignment Received:

Grading:

**Teacher's Comments**

\_\_\_\_\_  
**Teacher's Signature**

**Home Instructor: Keep this sheet when it is returned to you as a record of the student's progress.**



# INSTRUCTIONS FOR SENDING IN THIS DISTANCE LEARNING ASSIGNMENT BOOKLET

When you register for distance learning courses, you are expected to send in Assignment Booklets for corrections regularly. Try to send each Assignment Booklet as soon as you have completed it. Before sending your Assignment Booklet, please check the following:

- Are all the assignments completed? If not, explain why.
- Has your work been reread to be sure the spelling and details are correct?
- Is the record form filled out and the correct module label attached?

## MAILING

### 1. Postage Regulations

Do **not** enclose letters with Assignment Booklets.

**Send all letters in a separate envelope.**

### 2. Postage Rates

**Take your Assignment Booklet to the post office and have it weighed. Attach enough postage** and seal the envelope. Assignment Booklets will travel faster if correct postage is used and if they are in large envelopes that are no more than two centimetres thick.

## FAXING

1. Assignment Booklets may be faxed. Contact your teacher for the fax number.
2. All faxing costs are the responsibility of the sender.

## E-MAILING

Assignment Booklets may be e-mailed. Contact your teacher for the e-mail address.

# Mathematics 4

## Module 6 Division



## Assignment Booklet 6A



Learning  
Technologies  
Branch

Alberta  
LEARNING

## FOR TEACHER'S USE ONLY

### Summary

	Total Possible Marks	Your Mark
Day 1	27	
Day 2	23	
Day 3	17	
Day 4	34	
Day 5	23	
Day 6	15	
Day 7	23	
Day 8	(1) 76	
	(2) 28	
Day 9	(1) 5	
	(2) 10	
	281	

### Teacher's Comments

This document is intended for

Students	✓
Teachers	✓
Administrators	
Home Instructors	✓
General Public	
Other	

Mathematics 4  
Module 6: Division  
Assignment Booklet 6A  
Learning Technologies Branch  
ISBN 0-7741-1819-9

### ALL RIGHTS RESERVED

Copyright © 2000, the Crown in Right of Alberta, as represented by the Minister of Learning, Alberta Learning, 11160 Jasper Avenue, Edmonton, Alberta T5K 0L2. All rights reserved. Additional copies may be obtained from the Learning Resources Distributing Centre.

No part of this courseware may be reproduced in any form, including photocopying (unless otherwise indicated), without the written permission of Alberta Learning.

Every effort has been made both to provide proper acknowledgement of the original source and to comply with copyright law. If cases are identified where this effort has been unsuccessful, please notify Alberta Learning so that appropriate corrective action can be taken.

**IT IS STRICTLY PROHIBITED TO COPY ANY PART OF THESE MATERIALS UNDER THE TERMS OF A LICENCE FROM A COLLECTIVE OR A LICENSING BODY.**

# ASSIGNMENT BOOKLET 6A

## MATHEMATICS 4 – MODULE 6: DIVISION

### Notes to the Home Instructor

#### Learning Tasks

The nine mathematics modules and the accompanying Assignment Booklets have been developed so that students become involved in a variety of learning tasks that help them develop mathematical skills, learn how to communicate mathematically, and become mathematical problem solvers.

When completing the assignments, students should work carefully and neatly. Students should do the activities in the Assignment Booklets **independently**. This will ensure that the teacher acquires a more accurate picture of the student's ability and understanding.

If the student is having difficulties, he or she should review the appropriate sections in the Student Module Booklet. The home instructor can assist the student by reviewing these sections with the student and encouraging him or her to explain, describe, or demonstrate (using manipulatives, drawings, and so on) his or her understanding of a particular concept or idea.

#### Assessment and Evaluation

A broad range of assessment tools will be used to gather information for the purpose of evaluating the student's knowledge and understanding of curriculum skills and concepts. It is important that the teacher learns how the student thinks about mathematics as well as what concepts and skills the student has mastered. Assignment Booklet questions, journal entries, performance assessments, observations by the home instructor, and student self-evaluation pages may all be used. As well, the teacher may also use a final test.

In order to give the student and home instructor feedback on the student's current level of achievement throughout the school year, the student's teacher will provide written comments and assign a grade at the end of each module. The mark for each module will be determined primarily by how well the student completes the assignments in the Assignment Booklets. However, other broad-based assessment techniques (journal entries, performance assessments, and so on) may also be used.



27

## Day 1: What Does Division Mean?



5

1.

## Journal Entry

Think of the times when you have used division to help you share things with others. Write down **two** examples of these situations on the lines below, telling how you went about solving the problems.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

1

2. Write a division sentence to go with this drawing. (**Hint:** Think of this as a **sharing** problem.)



**Paulo**



Jamie



Wei



**Jess**



Lise

Division sentence: \_\_\_\_\_



- 3.** Solve the following story problems. Show how you solved each one by drawing a sketch. Then write the division sentence with the correct answer.

③

- a.** Ara was asked to hand out coloured paper to the students in her art group. She began passing out a stack of 36 sheets to the 4 students in her group. How many sheets of paper did she hand out to each student?

Sketch:

Division sentence: \_\_\_\_\_

③

- b.** Ara also handed out new coloured markers from a large box to the 4 students. The label on the box showed that there were 28 markers in the box. How many markers did each student get?

Sketch:

Division sentence: \_\_\_\_\_

4. Use ideas from the Writing Bank to write a sharing problem for each fact shown. Remember that all story problems need to end with a question.

Writing Bank	
Pennies .....	Children at a carnival
Glasses of pop .....	Teenagers at a party
CDs .....	Music lovers
Video games .....	Computer users
Apples .....	People at a picnic
Spruce trees .....	New homeowners
New chairs .....	Classrooms

⑤

a.  $18 \div 9 =$   

---

---

---

---

---

---

Show the solution in a division sentence. \_\_\_\_\_

Sentence answer: \_\_\_\_\_

---

⑤

b.  $42 \div 7 =$

---

---

---

---

---

---

Show the solution in a division sentence. \_\_\_\_\_

Sentence answer: \_\_\_\_\_

---

⑤

c.  $32 \div 4 =$

---

---

---

---

---

---

Show the solution in a division sentence. \_\_\_\_\_

Sentence answer: \_\_\_\_\_

---

23

## Day 2: Another Way to Look at Division

---

- ③ 1. Divide 27 into groups of 3. Draw a picture of how you solved this problem. (Use counters if you wish.)

- ④ 2. Divide 35 into groups of 7.

Write the division sentence here: \_\_\_\_\_

Draw your solution.

3. Use the Writing Bank to help you answer the following questions.

Writing Bank	
Eggs .....	Egg cartons
Pages of paper .....	Booklets of paper pages
Muffins .....	Packages of muffins
Chocolates .....	Gift boxes
Chairs .....	Rows for a concert
Straw bales .....	Stalls for horses
Photographs .....	Album pages
Hockey pucks .....	Practice games of hockey
Balloons .....	Party packages

③

- a. Write a story problem where 40 items are divided into groups of 8.  
Show your solution in a division sentence.

---

---

---

---

---

Division sentence: \_\_\_\_\_

③

- b. Write a story problem where 35 items are divided into groups of 5.  
Show your solution in a division sentence.

---

---

---

---

---

Division sentence: \_\_\_\_\_



4. Solve the following problems. Include a drawing in your solution.

- ⑤ a. How many licorice strings could you buy with 60¢ if each string costs 10¢? (**Hint:** Divide into groups of 10¢.) Include a drawing in your solution.

ANSWER TO THE PROBLEM

---

---

- ⑤ b. How many cases of candles could be made from 56 candles if each case holds 8 candles? Include a drawing in your solution.

ANSWER TO THE PROBLEM

---

---

17

## Day 3: Reviewing the Basic Division Facts

5

1. From the following set of division facts, circle the facts whose answer is 5.

$12 \div 3 =$

$15 \div 3 =$

$20 \div 5 =$

$18 \div 6 =$

$16 \div 4 =$

$32 \div 8 =$

$30 \div 6 =$

$36 \div 6 =$

$25 \div 5 =$

$20 \div 4 =$

$12 \div 6 =$

$35 \div 7 =$

1

2. The answer you get when you divide a number by another number is called the \_\_\_\_\_.

3

3. Write nine of the basic division facts whose answer is 7.

_____	_____	_____
_____	_____	_____
_____	_____	_____



4. Answer these questions as quickly as you can. Your home instructor could time you on this short test.

$30 \div 6 =$

$24 \div 8 =$

$15 \div 5 =$

$27 \div 9 =$

8

$14 \div 2 =$

$32 \div 8 =$

$45 \div 9 =$

$40 \div 5 =$

$16 \div 8 =$

$28 \div 7 =$

$25 \div 5 =$

$32 \div 8 =$

$42 \div 7 =$

$54 \div 9 =$

$49 \div 7 =$

$12 \div 6 =$

Minutes to complete all questions: \_\_\_\_\_

34

# Day 4: Multiplication and Division Are Related



1. Turn to page 99 in your textbook. Complete questions 1 through 21 of Practise Your Skills. Write your answers in the spaces provided.

## Practise Your Skills

1. a. \_\_\_\_\_

\_\_\_\_\_

b. \_\_\_\_\_

\_\_\_\_\_

2. \_\_\_\_\_ 3. \_\_\_\_\_ 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

7. \_\_\_\_\_ 8. \_\_\_\_\_ 9. \_\_\_\_\_ 10. \_\_\_\_\_ 11. \_\_\_\_\_

(You may use your multiplication table to complete the division problems if you wish.)

12. \_\_\_\_\_ 13. \_\_\_\_\_ 14. \_\_\_\_\_ 15. \_\_\_\_\_ 16. \_\_\_\_\_

17. \_\_\_\_\_ 18. \_\_\_\_\_ 19. \_\_\_\_\_ 20. \_\_\_\_\_ 21. \_\_\_\_\_

2. Label the numbers in this division sentence with their correct mathematical names.

$$\rightarrow 36 \div 9 = 4 \leftarrow$$



- ① 3. Write this division sentence in a different way. (**Hint:** Use another symbol to show division.)

$$48 \div 6 = 8$$

---

- ③ 4. Solve these problems in your head. Write the answers in the space provided.

a.  $8 \div 1 =$  \_\_\_\_\_

b.  $13 \div 1 =$  \_\_\_\_\_

c.  $22 \div 1 =$  \_\_\_\_\_

d.  $36 \div 1 =$  \_\_\_\_\_

e.  $67 \div 1 =$  \_\_\_\_\_

f.  $348 \div 1 =$  \_\_\_\_\_

5. Draw an array for each of the following number facts.

- ③ a.  $28 \div 4 = 7$  (Show 28 balls set out in lines of 7. Draw a line around each group of balls.)

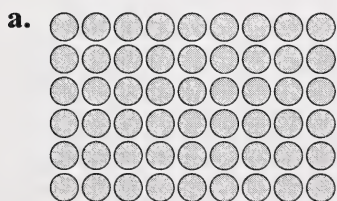


③

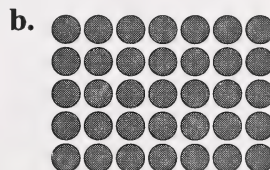
- b.  $35 \div 7 = 5$  (Show 35 candies shared equally by 7 boys. Draw a line around each group of candies.)

④

6. For each array, write **two** multiplication facts and **two** division facts.



- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_



- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

③

7. Write the missing number sentence that belongs with each set of related facts.

a.  $36 \div 9 = 4$

$36 \div 4 = 9$

$4 \times 9 = 36$

\_\_\_\_\_

b.  $4 \times 7 = 28$

$7 \times 4 = 28$

$28 \div 7 = 4$

\_\_\_\_\_

c.  $7 \times 8 = 56$

$56 \div 8 = 7$

$8 \times 7 = 56$

\_\_\_\_\_

23



5

## Day 5: Stepping Into Division

## 1. Journal Entry

You have learned four ways to divide numbers:

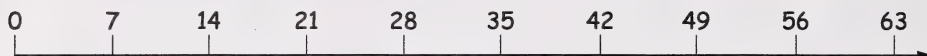
- using counters and drawing sketches
- using the multiplication table
- using a number line
- step or skip counting backward (repeated subtraction)

Tell which way or ways you like best. Tell **why** you like this way more than the others.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

- ③ 2. Write the division sentence for each of the following number lines.

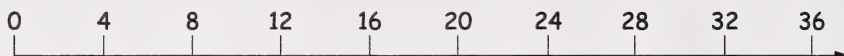
a. Division sentence: \_\_\_\_\_



b. Division sentence: \_\_\_\_\_



c. Division sentence: \_\_\_\_\_

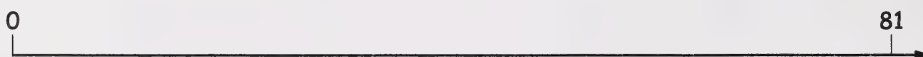


- ② 3. Show this division question on a number line. Space your jumps of 9 evenly on the line.

$$81 \div 9 = \boxed{\phantom{00}}$$

Solve the problem.

$$81 \div 9 = \underline{\hspace{2cm}}$$



- ⑤ 4. Follow the pattern of skip counting to fill in the blanks.

a. 40, 36, 32, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, 8, \_\_\_\_\_

b. 49, 42, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, 7

c. 35, 30, 25, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

d. 56, 48, \_\_\_\_\_, 32, \_\_\_\_\_, \_\_\_\_\_, 8

e. 36, \_\_\_\_\_, 24, \_\_\_\_\_, 12, \_\_\_\_\_

- ③ 5. Write a story problem about a birthday party to show the division sentence  $72 \div 8 = 9$ .

---

---

---

---

---

- ⑤ 6. Solve the following questions quickly in your head. Write the answers in the spaces provided. Cross out zeros to show your thinking.

a.  $620 \div 10 =$  \_\_\_\_\_

b.  $840 \div 10 =$  \_\_\_\_\_

c.  $750 \div 10 =$  \_\_\_\_\_

d.  $4200 \div 10 =$  \_\_\_\_\_

e.  $900 \div 100 =$  \_\_\_\_\_

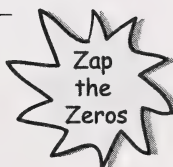
f.  $590 \div 10 =$  \_\_\_\_\_

g.  $7100 \div 100 =$  \_\_\_\_\_

h.  $5000 \div 100 =$  \_\_\_\_\_

i.  $8000 \div 10 =$  \_\_\_\_\_

j.  $6500 \div 100 =$  \_\_\_\_\_





15

## Day 6: Problem Solving

5

1. Use a table to help you solve this problem. You may use a calculator to help if you wish.

Mrs. Jing has come to the local bakery to buy buns for a picnic. She needs to buy **10 dozen** buns.

There is a strange kind of sale going on at the bakery. The price of buns is **\$1.60 for 1 dozen**, but is reduced by 10¢ for each bag after that. That is, if she buys **2 dozen**, the second bag will only cost **\$1.50**. If she buys 3 dozen, the price is again reduced by 10¢, and so on.

How much will Mrs. Jing pay in all for 10 dozen buns?

Buns	1st Dozen	2nd Dozen	3rd Dozen	4th Dozen	5th Dozen
Price	\$1.60	\$1.50	\$1.40		

Buns	6th Dozen	7th Dozen	8th Dozen	9th Dozen	10th Dozen
Price					

### ANSWER TO THE PROBLEM

Mrs. Jing will pay \_\_\_\_\_ for 10 dozen buns.

5

2. Use a table to solve this problem.

Nadia and her brother Ivan visit their friend in the hospital every third day. Janice and Tyler visit every fourth day. In the next three weeks, how many times will all the children visit the hospital on the same day? (They are all visiting today.)

Days	1	2	3	4	5	6	7	8	9	10	11
Nadia and Ivan											
Janice and Tyler											

Days										
Nadia and Ivan										
Janice and Tyler										

ANSWER TO THE PROBLEM

They will visit the hospital on the same day \_\_\_\_\_ times in the next three weeks.

Here's a problem that can be solved by using more than one strategy. Read the problem and decide which strategy you will use. Then solve the problem.

- ⑤ 3. Shelly wants to mail a letter to her pen pal. She needs to put on stamps worth 45¢. All she has are 15-cent, 10-cent, and 5-cent stamps. How many different combinations of stamps can Shelly put on the letter?

ANSWER TO THE PROBLEM

Shelly can put \_\_\_\_\_ different combinations of stamps on her letter.

23

## Day 7: What About the Leftovers?

---

③

1. Draw a picture to show how you would share 26 hockey cards between 7 children. **Colour** the cards that are left over (the **remainder**).

2. You and three friends have been hired to deliver 46 magazines to local businesses. The four of you decide to share the deliveries equally.

①

- a. Is this possible?
- 

③

- b. Show your solution by drawing a sketch. If there is a remainder, colour it.

①

- c. The division sentence for this problem is \_\_\_\_\_.

- ④ 3. Eight children at a party want to share 50 cookies equally. How many cookies will each child get? How many cookies will be left over? Draw a sketch of your solution.

The division sentence for this problem is \_\_\_\_\_.

- ③ 4. Decide if the remainders in these division situations can be further divided into equal parts.

- a. 26 hamburgers, 10 hungry children

Can the remainder be divided again? Yes \_\_\_\_\_ No \_\_\_\_\_

- b. 19 flower vases, 5 restaurant tables

Can the remainder be divided again? Yes \_\_\_\_\_ No \_\_\_\_\_

- c. 74 balloons, 7 parties

Can the remainder be divided again? Yes \_\_\_\_\_ No \_\_\_\_\_

- ④ 5. Show how you would solve  $43 \div 5 = \square$  by using repeated subtraction.  
(**Hint:** Write a list of number sentences to show this.)

Write the division sentence to show the answer. \_\_\_\_\_

- ④ 6. Show how you would solve  $56 \div 6 = \square$  by using repeated subtraction.

Write the division sentence to show the answer. \_\_\_\_\_



## Day 8: Putting It All Together (I)

---

76

### Part 1: Reviewing the Concepts

Use what you have learned about division to complete the following questions. Look back in the Student Module Booklet if you need to review any of the concepts you have learned. You are to complete **all** of the questions in Part 1.

- ③ 1. Draw a picture to show 15 marbles being shared equally between 3 children.

- ③ 2. Draw a picture that shows \$21 being divided equally among 7 students.

④

3. Answer the following problems.

- a. 30 cups of hot chocolate  $\div$  6 skaters = \_\_\_\_\_ cups each
- b. 25 silk roses  $\div$  5 roses in each vase = \_\_\_\_\_ vases
- c. 42 hamburger buns  $\div$  6 buns per package = \_\_\_\_\_ packages
- d. 28 comic books  $\div$  4 students = \_\_\_\_\_ comic books per student

③

4. Choose one of the problems in question 3. Write a story problem using the ideas given in the problem. End the problem with a question. (**Do not** include the solution in the story problem.)

---

---

---

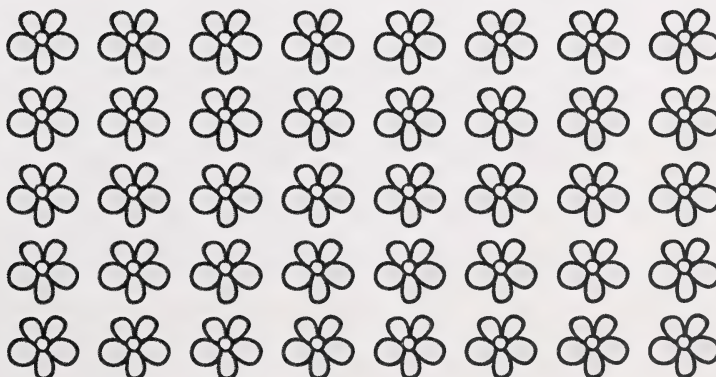
---

---

②

5. Write **two** division sentences and **two** multiplication sentences for the following array:

• \_\_\_\_\_ • \_\_\_\_\_  
• \_\_\_\_\_ • \_\_\_\_\_





6. Turn to page 106 of your text. Complete Skill Bank questions 12, 13 and 14 in the spaces provided. The first question has been done for you.

**Skill Bank, Question 12**

14

12. a.  $3 \times 8 = 24$ ,  $8 \times 3 = 24$ ,  $4 \times 6 = 24$ ,  $6 \times 4 = 24$ ,  $12 \times 2 = 24$ ,  
 $2 \times 12 = 24$ ,  $1 \times 24 = 24$ ,  $24 \times 1 = 24$

- b. \_\_\_\_\_  
\_\_\_\_\_
- c. \_\_\_\_\_  
\_\_\_\_\_
- d. \_\_\_\_\_  
\_\_\_\_\_
- e. \_\_\_\_\_  
\_\_\_\_\_
- f. \_\_\_\_\_  
\_\_\_\_\_
- g. \_\_\_\_\_  
\_\_\_\_\_
- h. \_\_\_\_\_  
\_\_\_\_\_

**Skill Bank, Question 13**

⑩

13. a. \_\_\_\_\_, Related division fact: \_\_\_\_\_  
b. \_\_\_\_\_, Related division fact: \_\_\_\_\_  
c. \_\_\_\_\_, Related division fact: \_\_\_\_\_  
d. \_\_\_\_\_, Related division fact: \_\_\_\_\_  
e. \_\_\_\_\_, Related division fact: \_\_\_\_\_  
f. \_\_\_\_\_, Related division fact: \_\_\_\_\_  
g. \_\_\_\_\_, Related division fact: \_\_\_\_\_  
h. \_\_\_\_\_, Related division fact: \_\_\_\_\_  
i. \_\_\_\_\_, Related division fact: \_\_\_\_\_  
j. \_\_\_\_\_, Related division fact: \_\_\_\_\_

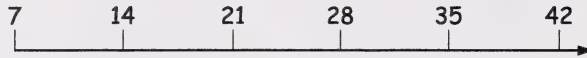
**Skill Bank, Question 14**

⑩

14. a. \_\_\_\_\_, Related multiplication fact: \_\_\_\_\_  
b. \_\_\_\_\_, Related multiplication fact: \_\_\_\_\_  
c. \_\_\_\_\_, Related multiplication fact: \_\_\_\_\_  
d. \_\_\_\_\_, Related multiplication fact: \_\_\_\_\_  
e. \_\_\_\_\_, Related multiplication fact: \_\_\_\_\_  
f. \_\_\_\_\_, Related multiplication fact: \_\_\_\_\_  
g. \_\_\_\_\_, Related multiplication fact: \_\_\_\_\_  
h. \_\_\_\_\_, Related multiplication fact: \_\_\_\_\_  
i. \_\_\_\_\_, Related multiplication fact: \_\_\_\_\_  
j. \_\_\_\_\_, Related multiplication fact: \_\_\_\_\_

①

7. Write the division sentence shown by this number line.



Division sentence: \_\_\_\_\_

⑥

8. Write a camping story problem that tells about the division sentence  $36 \div 3$ . Name the people in your story. End your story with a question. Solve your problem by using the repeated subtraction method.

---

---

---

---

---

---

---

**Solution:** Write the repeated subtraction pattern to show  $36 \div 3$ .

- ④ 9. Complete the following patterns by skip counting backward from the first number.
- a. 32, 28, 24, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.
- b. 16, 14, 12, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.
- c. 50, 45, 40, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.
- d. 49, 42, 35, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.
- ① 10. Write the division sentence that fits this pattern of skip counting backward (or repeated subtraction.) Include the solution in your sentence.
- 56, 48, 40, 32, 24, 16, 8
- Division sentence: \_\_\_\_\_
- ③ 11. Draw a picture to show  $19 \text{ balloons} \div 5 \text{ groups}$ . Colour any remainders you may have.



- ① 12. Write the complete division sentence (including the solution) that fits this picture.



Division sentence: \_\_\_\_\_

- ⑤ 13. Show how you would solve  $17 \div 3$  by subtracting 3 over and over again (repeated subtraction).

What is the remainder? \_\_\_\_\_

Write the division sentence. \_\_\_\_\_

⑥

14. Solve these problems quickly in your head. Write the answers in the spaces provided.

a.  $9 \div 1 =$  \_\_\_\_\_

b.  $16 \div 1 =$  \_\_\_\_\_

c.  $25 \div 1 =$  \_\_\_\_\_

d.  $47 \div 1 =$  \_\_\_\_\_

e.  $50 \div 10 =$  \_\_\_\_\_

f.  $370 \div 10 =$  \_\_\_\_\_

g.  $750 \div 10 =$  \_\_\_\_\_

h.  $400 \div 100 =$  \_\_\_\_\_

i.  $6800 \div 100 =$  \_\_\_\_\_

j.  $5300 \div 10 =$  \_\_\_\_\_

k.  $3000 \div 10 =$  \_\_\_\_\_

l.  $4900 \div 100 =$  \_\_\_\_\_

28

## Part 2: Challenge Activities

Choose **either** Activity A **or** Activity B. You may do both if you wish.

### Activity A: Planting Shrubs

You have been given the job of **Town Landscape Planner** for your local community.

15

A new park has been created in the grassy area behind the library and your job is to plant several kinds of shrubs in this area. The mayor is rather fussy about how these are to be planted—he loves **rows** of shrubs! He doesn't like them planted randomly around the park. You are asked to give him several choices on how to plant these shrubs in rows. He will make the final decision at next week's council meeting.

Your problem: How many ways can 50 shrubs be arranged in rows in the park?

Your solution: There is actually more than one solution. Fifty shrubs can be planted in many ways.

⑩

1. Continue this outline to find ten ways to plant 50 shrubs. (You will need to use division to find the answers. You may use counters, draw sketches, or use the multiplication table to help you.)

**50 Shrubs**

- 1 row of 50 shrubs ( $1 \times 50 = 50$ )      No extra shrubs left
- 2 rows of \_\_\_\_\_ shrubs ( \_\_\_\_\_ ) \_\_\_\_\_ extra shrubs left
- 3 rows of \_\_\_\_\_ shrubs ( \_\_\_\_\_ ) \_\_\_\_\_ extra shrubs left
- 4 rows of \_\_\_\_\_ shrubs ( \_\_\_\_\_ ) \_\_\_\_\_ extra shrubs left
- 5 rows of \_\_\_\_\_ shrubs ( \_\_\_\_\_ ) \_\_\_\_\_ extra shrubs left
- 6 rows of \_\_\_\_\_ shrubs ( \_\_\_\_\_ ) \_\_\_\_\_ extra shrubs left
- 7 rows of \_\_\_\_\_ shrubs ( \_\_\_\_\_ ) \_\_\_\_\_ extra shrubs left
- 8 rows of \_\_\_\_\_ shrubs ( \_\_\_\_\_ ) \_\_\_\_\_ extra shrubs left
- 9 rows of \_\_\_\_\_ shrubs ( \_\_\_\_\_ ) \_\_\_\_\_ extra shrubs left
- 10 rows of \_\_\_\_\_ shrubs ( \_\_\_\_\_ ) \_\_\_\_\_ extra shrubs left

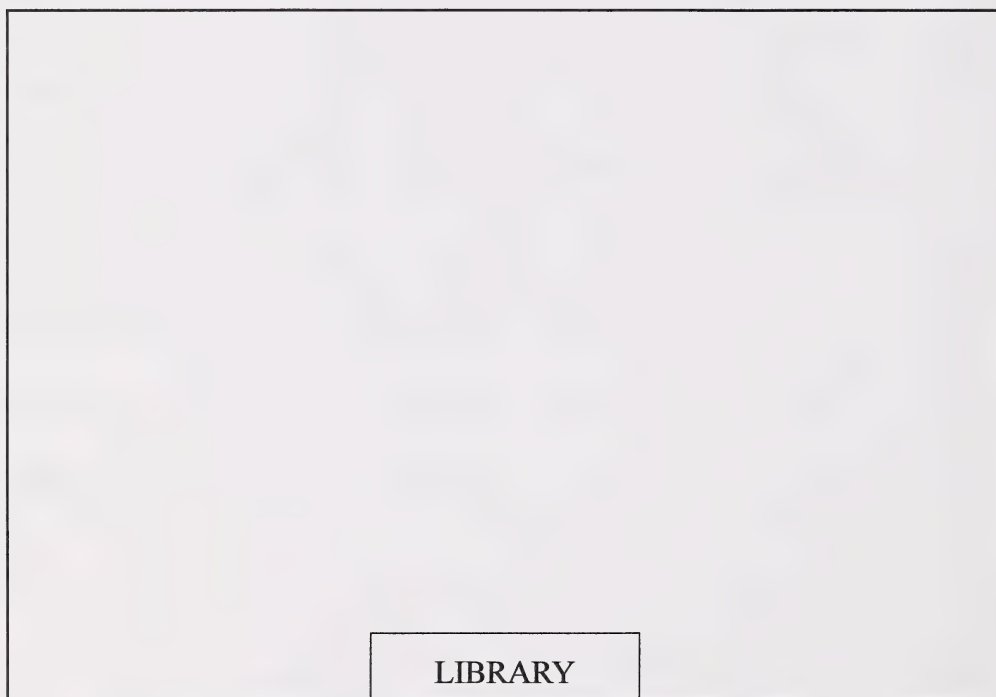
Now that you have found ten ways to plant 50 shrubs, you must show them to the mayor so that he can choose one solution to this landscaping problem. The mayor has also asked you to select your favourite plan. (This may help the mayor make the final choice!)

You must also decide where to plant any leftover shrubs.

⑤

2. Draw your favourite shrub plan in the space provided. Draw an array or arrangement of the shrubs. Tell what you would do with the leftover shrubs.

My Favourite Shrub Plan:



LIBRARY

Where I Would Plant the Leftover Shrubs:

---

---

---

---

13

**Activity B: Price Check**

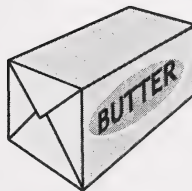
You are shopping for groceries at two local supermarkets. Your job is to find the best buy for each of the items on your grocery list. You are to report your findings to your parents when you return from the supermarkets. The prices for the items in the stores are listed below. Use what you know about division to find the best buy.

**Supermarket A**

**Apples**  
2 for  
70¢



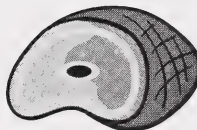
**Butter**  
1 pound  
for \$1.99



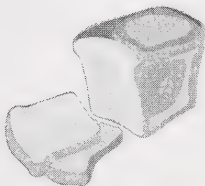
**Hard Candy**  
5 for  
45¢



**Sliced Ham**  
100 g for  
\$1.00



**Bread**  
2 for  
\$1.00

**Supermarket B**

**Apples**  
3 for  
\$1.00

**Butter**  
1 pound  
for \$2.09

**Hard Candy**  
6 for  
50¢

**Sliced Ham**  
20 g for  
30¢

**Bread**  
10 for  
\$10.00



10

1. Fill in the chart to compare prices. Write division sentences for each item and solve to find the best buy. (The best buy will be the lowest price for an item.)

	Supermarket A	Supermarket B	Best Buy (A or B)
Apples	$70¢ \div 2 = \underline{\hspace{2cm}}$	$\$1.00 \div 3 = \underline{\hspace{2cm}}$	
Butter	$\$1.99 \div 1 = \underline{\hspace{2cm}}$	$\underline{\hspace{2cm}} = \underline{\hspace{2cm}}$	
Hard Candy	$\underline{\hspace{2cm}} = \underline{\hspace{2cm}}$	$\underline{\hspace{2cm}} = \underline{\hspace{2cm}}$	
Sliced Ham	$\underline{\hspace{2cm}} = \underline{\hspace{2cm}}$	$\underline{\hspace{2cm}} = \underline{\hspace{2cm}}$	
Bread	$\underline{\hspace{2cm}} = \underline{\hspace{2cm}}$	$\underline{\hspace{2cm}} = \underline{\hspace{2cm}}$	

3

2. Would you tell your parents that Supermarket A is a better place to shop than Supermarket B? Explain.

---



---



---

## Day 9: Assessing What You Know (I)

### Home Instructor's Assessment Page for Day 9

#### Directions for the Home Instructor

Remove this sheet from the Assignment Booklet. Use the Checklist and Comments sections to help evaluate the student's work. When the Day 9 activities have been completed, firmly attach this sheet to Assignment Booklet 6A.

Student's Name \_\_\_\_\_

Home Instructor \_\_\_\_\_ Date \_\_\_\_\_

Indicate in the Checklist and Comments sections what you observe and hear as the student works through the assessment task. Encourage the student to “think out loud” as he or she works. As you observe, you may wish to use questions or prompts like the following to help in determining the student's level of understanding.

- What information is the problem asking you to find?
- What do you have to do first to solve this problem?
- Why would Making a Table be a good way to solve this problem?
- What information would you put across the top of your chart?
- How would you set up the rest of your table to solve this problem?

**Checklist**

- A. The student could identify the question asked in the problem.

☐ Yes

☐ Not yet
- B. The student could explain why Making a Table would assist in solving this problem.

☐ Yes

☐ Not yet
- C. The student could begin arranging the information in chart form.

☐ Yes

☐ Not yet
- D. The student shows an understanding of how to use the Making a Table strategy to solve problems.

☐ Yes

☐ Not yet

**Comments**

Add any comments you have regarding the student’s performance on the assessment task or any other information about the student’s learning experiences in this module that you would like to share with the teacher.

---

---

---

---

---

---

---

---

---

---

---

---

## Day 9: Assessing What You Know (I)

### Student's Assessment Page for Day 9

Student's Name \_\_\_\_\_

5

### Part 1: Showing What You Can Do

**Note:** You may use any manipulatives or cut-out learning aids available to help solve the following problem.

#### Problem Solving

Use the Making a Table strategy (or any other strategy you wish) to solve the following problem.

Trent and Brent met for lunch on the first day of school. They decide to meet each day that they can. Trent can't always be there because he has band practise every third day (beginning on Day 3). Brent can't always be there because he has basketball every fourth day (beginning on Day 4). How often will the two boys have met for lunch after 20 days of school?

ANSWER TO THE PROBLEM

---

---



10

## Part 2: Basic Number Facts

This section is made up of two timed tests. Ask your home instructor to time you as you do each test. Wait for your home instructor to tell you when to begin. **Do not mark these tests. They will be marked by your teacher.**

### 1. Multiplication Number Facts

**Timed Test: 2 minutes**

⑤

$5 \times 5 =$

$7 \times 3 =$

$4 \times 8 =$

$9 \times 8 =$

$6 \times 3 =$

$$\begin{array}{r} 4 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 4 \\ \hline \end{array}$$

$7 \times 7 =$

$9 \times 2 =$

$3 \times 6 =$

$3 \times 9 =$

$5 \times 8 =$

$$\begin{array}{r} 5 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 3 \\ \hline \end{array}$$

$6 \times 5 =$

$8 \times 3 =$

$4 \times 9 =$

$3 \times 4 =$

$9 \times 7 =$



If you finish before the two minutes are up, check your answers. Wait for your home instructor to tell you when to begin the next test.

## 2. Division Number Facts

Timed Test: 2 minutes

$3 \div 1 =$

$8 \div 4 =$

$40 \div 8 =$

$36 \div 6 =$

$72 \div 9 =$

$7 \overline{)21}$

$4 \overline{)36}$

$5 \overline{)20}$

$8 \overline{)48}$

$7 \overline{)56}$

$27 \div 3 =$

$24 \div 24 =$

$25 \div 5 =$

$64 \div 8 =$

$28 \div 7 =$

$9 \overline{)63}$

$9 \overline{)27}$

$9 \overline{)81}$

$7 \overline{)49}$

$6 \overline{)18}$

$42 \div 7 =$

$20 \div 4 =$

$12 \div 4 =$

$16 \div 4 =$

$32 \div 8 =$



If you finish before the two minutes are up, check your answers.



